PTO/SB/ 44 (10-96)

Approved for use through 6/30/99. OMB 0651-0033

U.S Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Docket Number(Optional) PRE-APPEAL BRIEF REQUEST FOR REVIEW YOR920030425US1 I hereby certify this correspondence is being deposited with the Application Number Filed united States Postal Service with sufficient postage as first class 10/699.399 October 30, 2003 mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents. P.O. Box 1450, Alexandria, VA 22313-1450"[37 CFR First Named Inventor Supratik GUHA Signature Art Unit Examiner Typed or printed 2859 Mirellys Jagan Name Mariah Moorhead Application requests review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a notice of appeal. The review is requested for the reason(s) stated on the attached sheet(s) Note: No more than five (5) pages may be provided. I am the applicant/inventor. Signature assignce of record of the entire Interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB.96) Gibbons Typed or printed name attorney or agent record. (561) 989-9811 . Registration number 37,333 Telephone number attorney or agent acting under 37 CFR 1 34 . Registration number if acting under 47 CFR 1.34 NOTE: Signatures of all the inventors or assignces of record of the entire Interest of their representatives(s) are required. Submit multiple forms if more than one signature is required, see below*. Ø) forms are submitted.

This collection of information is required by 35 U.S.C. 132. The Information Is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) and application. Centificentiality is governed by 35 U.S.C. 122 and 37 CFR. 1.1, 1.14 and 41.6. This collection is estimated that 21 artimates to complete, including gathering, preprinting, and authoriting the completed application to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Office. Mall Sloy. Af, Commissioner of Patents, P.O. Box 459, Alexandria, VA 22131-459.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/699,399 Confirmation No. 3291

Applicant : Supratik Guha Filed : 10/30/2003 TC/A.U. : 2859

Examiner : Mirellys JAGAN
Docket No. : YOR920030425US1

Customer No. : 23334

PRE-APPEAL BRIEF REQUEST FOR REVIEW

The following remarks are submitted with the Applicant's notice of appeal. The only issue on appeal is whether the combination of Davidson (U.S. Patent No. 6,140,141) and Paniccia (U.S. Patent No. 6,251,706), as set forth by Examiner Jagan in both the June 26, 2006 non-final Office Action and the December 4, 2007 Final Office Action, is proper.

In the non-final Office Action of June 26, 2006, independent claim 7 was rejected under 35 U.S.C. § 102(b) as being anticipated by Davidson and claims 3, 9, 10, 15-22, and 30 were rejected under 35 U.S.C. §103(a) as being unpatentable over Davidson in view of Paniccia.

In Applicant's reply to the June 26, 2006 non-final Office Action, Applicants pointed out that, as opposed to the present invention, which senses temperatures of an electronic device through detection of infrared (IR) radiation through an IR transparent window that serves as a wall to a cooling duct that passes fluid over the device, the Davidson reference discloses sensing voltages (not heat) through detection of polarization (not IR radiation) of light emitted from the device. Davidson, col. 1, lines 25-29. Applicants submitted an expert opinion, in the form of a Declaration under 37 CFR § 1.132, stating that the two specifically recited materials for the window in Davidson (fused quartz and BK-7 glass) are inoperable for thermal imaging of the present invention, which only utilizes wavelengths in the IR range, above 4 microns.

In the December 04, 2007 Final Office Action, the Examiner removed the rejection under 35 U.S.C. § 102(b).

Also in Applicant's reply to the June 26, 2006 non-final Office Action, Applicants pointed out that although the Paniccia reference uses a window material that is transparent to IR wavelengths, Paniccia does not show or suggest the window being part of a cooling system that uses coolant flowing through a duct so as to cool an electronic device, as recited in the independent claims of the instant application. In the Final Office Action of December 4, 2006, the Examiner maintained the rejection under 35 U.S.C. § 103(a) of Davison in view of Paniccia.

In order to combine or modify references under 35 USC § 103, there must be a sufficient suggestion or motivation for combining the references with a reasonable expectation of success. MPEP § 2143. There is none in Davidson and there is none in Paniccia. To support the motivation to combine Davidson and Paniccia, the Examiner states on page 4 of the December 4, 2007 Final Office Action, "By replacing the window with a window as taught by Paniccia, in order to provide a window having a desired thermal conductivity to remove heat depending on the heat removal requirements of a particular application, and since the particular type of material used to make the window is only considered to be the use of a "preferred" or "optimum" material out of a plurality of well know materials that a person having ordinary skill in the art at the time the invention was made would have been able to provide based on intended use of applicant's apparatus, i.e., suitability for the intended use of applicant's apparatus. which in this case is to provide a window that is partially transparent to photons with wavelengths above 3.6 microns, as taught by Davidson and Paniccia." Regardless of how these two references are combined, Davidson and Paniccia will produce an inoperable result.1 First of all, one would not be motivated to take the IR transparent

¹ <u>Michael L. McGinely versus Franklin Sports, Inc.</u> (Fed Cir 2001) ("If references taken in combination would produce a 'seemingly inoperative device,' we have held that such references teach away from the combination and thus cannot serve as predicates for a prima facie case of obviousness."); <u>In re Sponnoble</u>, 405 F.2d 578, 587, 160 USPQ 237, 244 (CCPA 1969) (references teach away from combination if combination

window of Paniccia and place it in the liquid cooling duct of Davidson because the materials recited in Davidson for sensing polarization of light work well for their intended use, which is at lower wavelengths. Second, one would not be motivated to take the IR camera of Paniccia and use it to replace the polarization sensing device of Davidson, simply because Davidson would no longer be able to sense voltages through detection of light polarization. Therefore, Davidson would be inoperable. References that produce seemingly inoperative devices cannot serve as predicates for a *prima facie* case of obviousness. ¹

On the other hand, if one were to take the glass of Paniccia and replace it with the glass of Davison, the IR detector of Paniccia would no longer function because IR wavelengths cannot pass through fused quartz or BK-7 glass.² In addition, Paniccia doesn't have, teach, or suggest a duct with coolant flowing through it, as recited in the independent claims of the instant application.

Therefore, one would not be motivated to combine the Paniccia reference with the Davidson reference or the Davidson reference with the Paniccia reference. When there is no suggestion or teaching in the prior art, the suggestion can not come from the Applicant's own specification. The Federal Circuit has repeatedly warned against using the Applicant's disclosure as a blueprint to reconstruct the claimed invention out of isolated teachings of the prior art. See MPEP § 2143 and Grain Processing Corp. v. American Maize-Products, 840 F.2d 902, 907, 5 USPQ2d 1788 1792 (Fed. Cir. 1988) and In re Fitch, 972 F.2d 160, 12 USPQ2d 1780, 1783-84 (Fed. Cir. 1992). The prior art reference Davidson taken alone and/or in view of Paniccia does not suggest, teach or mention "a duct adapted to be coupled with an electronic device, wherein the electronic device forms one side of the duct; a coolant flowing through the duct so as to cool the electronic device; and a photon detector located adjacent to the duct for detecting photons emitted from the electronic device, wherein the duct and the coolant

produces seemingly inoperative device); see also In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984) (inoperable modification teaches away).

² See Applicant's June 26, 2006 Declaration under 37 CFR § 1.132.

are at least partially transparent to photons with wavelengths above 3.6 microns and the duct is made of at least one of polished silicon, quartz, sapphire, glass, and diamond," as recited in independent claim 7 of the instant application. The prior art reference Davidson taken alone and/or in view of Paniccia also does not suggest, teach or mention "detecting, by a photon-detector, photons from an electronic device during operation of the electronic device, the photons indicative of thermal characteristics of the electronic device, the photon detector located adjacent to a duct that is adjacent to the electronic device, wherein the electronic device forms one side of the duct and a coolant flows through the duct so as to cool the electronic device and the duct and the coolant are at least partially transparent to photons with wavelengths above 3.6 microns and the duct is made of at least one of polished silicon, quartz, sapphire, glass and diamond," as recited in independent claim 19 of the instant application.

Accordingly, claims 7 and 19 distinguish over Davidson taken alone and/or in view of Paniccia. Dependent claims 3-6, 9-12, 15-18, 21-23, 29, and 30 are believed to be patentable as well because they are dependent on either claim 7 or claim 19. Applicants respectfully submit that the Examiner's rejection under 35 U.S.C. § 103(a) has been overcome.

Applicant's hereby respectfully request reconsideration and allowance of pending claims 3-12, 15-23, 29, and 30 of the instant application.

PLEASE CALL the undersigned if that would expedite the prosecution of this application.

Respectfully submitted,

Date: March 4, 2007

Scott Smiley, Reg. No. 55,627

Attorney for Applicants

ons, Reg. No. 37,333 Atterney for Applicants

FLEIT, KAIN, GIBBONS, GUTMAN, BONGINI, & BIANCO P.L. 551 N.W. 77th Street, Suite 111 Boca Raton, FL 33487 Tel (561) 989-9811

Fax (561) 989-9812